Art Unit: 2618 PATENT
Application No.: 09/775,529 Attorney Docket: 678-562 (P9449)

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A key input method for diversifying key functions in a mobile telecommunication terminal, comprising the steps of:

detecting whether a user has input a single scroll key corresponding to a menu, the single scroll key for menu scrolling in at least one of left, right, upward and downward directions, the single scroll key one of a left-right direction and a downward-upward direction, and being any one key of a plurality of keys including alphanumeric keys provided on the mobile telecommunication terminal and operation of the single scroll key being defined solely with a single or consecutive inputs of the single scroll key;

detecting whether the user has consecutively input the same single scroll key before elapse of a predetermined time period for consecutive input; and

if so, performing a sub-menu of the menu according to a number of times of consecutive input of the same single scroll key.

- 2. (Previously Presented) The key input method of claim 1, further comprising a step of performing an original function of the input key when the user has not consecutively input the same key before elapse of the predetermined time period for consecutive input.
- 3. (Canceled)
- 4. (Previously Presented) The key input method of claim 1, wherein the single scroll key is one a plurality of functional keys in the mobile telecommunication terminal.
- 5. (Currently Amended) A key input method for diversifying key functions in a mobile telecommunication terminal, comprising:

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detecting whether a user has set a scroll function when displaying a menu screen; if so, detecting whether an input state of a single scroll key set for a scroll function is maintained for a predetermined period of time, the single scroll key for menu scrolling in at least one of left, right, upward and downward directions, the single scroll key one of a left-right direction and a downward-upward direction, and being any one key of a plurality of keys including alphanumeric keys provided on the mobile telecommunication terminal and operation of the single scroll key depending solely on a maintenance of a key input state of the single scroll key; and

controlling directional movement of a cursor on the displayed menu screen depending only on the maintenance of the key input state for the predetermined period of time and only after the predetermined time has elapsed.

6. (Previously Presented) A key input method for diversifying key functions in a mobile telecommunication terminal, comprising:

detecting whether a user has set a scroll function when displaying a menu screen; if so, detecting whether an input state of a key set for a scroll function is maintained for a predetermined period of time; and

controlling the position of a cursor positioned at a particular item of the displayed menu screen depending on maintenance of the key input state for the predetermined period of time, and when the menu screen comprises a scroll screen of upward and downward directions, the controlling including:

moving and displaying the cursor of the menu item to a downward menu item when the key input state is not maintained for the predetermined period of time; and moving and displaying the cursor of the menu item to an upward menu item when the key input state is maintained for the predetermined period of time.

7. (Previously Presented) A key input method for diversifying key functions in a mobile telecommunication terminal, comprising:

detecting whether a user has set a scroll function when displaying a menu screen; if so, detecting whether an input state of a key set for a scroll function is maintained

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for a predetermined period of time; and

controlling the position of a cursor positioned at a particular item of the displayed menu screen depending on maintenance of the key input state for the predetermined period of time;

moving and displaying the cursor of the menu item to an upward menu item when the key input state is not maintained for the predetermined period of time; and

moving and displaying the cursor of the menu item to a downward menu item when the key input state is maintained for the predetermined period of time.

8. (Previously Presented) A key input method for diversifying key functions in a mobile telecommunication terminal, comprising:

detecting whether a user has set a scroll function when displaying a menu screen; if so, detecting whether an input state of a key set for a scroll function is maintained for a predetermined period of time; and

controlling the position of a cursor positioned at a particular item of the displayed menu screen depending on maintenance of the key input state for the predetermined period of time, and when the menu screen comprises a scroll screen of left and right directions, the controlling including:

moving and displaying the cursor of the menu item to a right menu item when the key input state is not maintained for the predetermined period of time; and moving and displaying the cursor of the menu item to a left menu item when the key input state is maintained for the predetermined period of time.

9. (Previously Presented) A key input method for diversifying key functions in a mobile telecommunication terminal, comprising:

detecting whether a user has set a scroll function when displaying a menu screen; if so, detecting whether an input state of a key set for a scroll function is maintained for a predetermined period of time; and

controlling the position of a cursor positioned at a particular item of the displayed menu screen depending on maintenance of the key input state for the predetermined period of

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time;

moving and displaying the cursor of the menu item to a left menu item when the key input state is not maintained for the predetermined period of time; and

moving and displaying the cursor of the menu item to a right menu item when the key input state is maintained for the predetermined period of time.

- 10. (Previously Presented) The key input method of claim 5, wherein the menu screen is displayed on a liquid crystal display in the mobile telecommunication terminal.
- 11. (Previously Presented) The key input method of claim 5, wherein the single scroll key set for the scroll function is one of a plurality of functional keys in the mobile telecommunication terminal.